NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD

LAND CLEARING

(Ac.)
Code 460

DEFINITION

Removing trees, stumps, and other vegetation to achieve a conservation objective.

PURPOSE

Allow needed land use adjustments and improvements in the interest of conservation, and the land will be used according to its capabilities.

CONDITIONS WHERE PRACTICE APPLIES

This practice applies to wooded areas where the removal of trees, stumps, brush, and other vegetation is needed in carrying out a conservation plan.

CRITERIA

Planned work shall comply with all federal, state, and local rules, laws, and regulations and with due regard to the safety of persons and property. Some clearing activities may require a U.S. Army Corps of Engineers Section 10 or 404 permit.

Clearing shall be done when the soil moisture content is such that soil structural damage or compaction is minimized.

A minimum width of 50 feet of undisturbed area shall be left between the area being cleared and all wetlands, water bodies, and perennial streams.

Temporary cover shall be established as necessary to control sheet and rill and/or wind erosion on the cleared area until the planned land use is in place.

The cleared area shall be left in a condition that will facilitate the planned use and treatment of the land.

Limit pushing the clearing debris into standing or green timber due to increased maintenance issues for re-clearing, damaging other trees making them susceptable to insect damage, and the potential of creating a fire hazard. A pile should not be closer than 100 feet from adjacent woodland, buildings, or roads. Clear the strip under the berm to minimize vegetation growth in the berm.

Strip clearing and windrowing of debris shall be conducted perpendicular to the slope to prevent accelerated erosion.

CONSIDERATIONS

Consider land clearing during a dry period to minimize disturbance and movement of topsoil.

Ground disturbing activities associated with this practice have the potential to affect significant cultural resources. Consider using methods that cause the least disturbance to the ground surface.

Consider the size of material to be removed when selecting land clearing methods. Land clearing is usually more efficient if the tree is less than 4-inches in diameter. When clearing larger trees, the root wad or crown should be removed during drier soil conditions. Avoid rough pushing under wet conditions to prevent

creation of deep ruts and burying debris complicating final cleanup.

If a salvage harvest is made before clearing, leaving taller stumps will facilitate final clearing and grubbing activities.

Special attention should be given to maintaining habitat for fish and wildlife. Strip clearing, windrowing debris, and maintaining den and food trees can minimize impacts on wildlife.

The orientation and layout of berm piles should be considered. Consider chaining or pushing trees down parallel to each other, and to follow topographical contours. The pile should be high, narrow, and compact and free of topsoil and snow. Piles with excess debris do not cure properly. Berms are normally 15 to 25 feet wide by 10 to 15 ft high, and are spaced 150 to 200 feet apart. A break of 30 feet between berms is recommended for every 200 feet of berm length to act as a firebreak, allow natural drainage or runoff, and facilitate equipment.

Consider the steepness of slope when selecting the size and type of equipment needed to clear land.

Select the size of equipment based on its intended purpose. Light vegetation and ground cover can be rotary mowed or removed by tillage using a rotary plow or a heavy-duty disc. When clearing timber consider shearing with an angled dozer blade or vee blade for small to medium diameter trees, or chaining for larger trees. A toothed brush blade or stacking blade is appropriate for piling and cleanup by reducing the amount of soil in a berm pile.

Consider the size of the equipment used in clearing operations. Select equipment sizes and capacities that will handle the clearing tasks in a timely and economically feasible manner. A medium-sized bulldozer, D-6 or equivalent, should be able to handle small to medium sized timber. A large bulldozer, D-9 or equivalent, could be used for chaining and rough piling.

Where possible and practicable, select land clearing methods and treatments that minimize or eliminate the potential to spread or introduce weeds and invasive non-native plants.

Consider steam cleaning equipment prior to site work activities to minimize the spread or introduction of weeds into a newly cleared field.

Consideration should be given to limit the spread of seed and plant material from non-native invasive plants. Consider treating non-native invasive plants with herbicide prior to removal and/or burning. When treating sites that have Melaleuca, Brazilian pepper, tropical soda apple, Chinese tallow trees, Japanese or Old World climbing fern, or any other non-native invasive species listed as a Category I invasive plant by the Florida Exotic Pest Plant Council, care should be taken to limit the spread of their seeds or spores.

Land clearing can increase the volume and rate of runoff. This is more pronounced on steeper land.

Consider the disposal of vegetation with regards to carbon sequestration. Burying, composting, or mulching the debris would limit the release of carbon.

PLANS AND SPECIFICATIONS

Plans and specifications for land clearing shall be in keeping with this standard and shall describe the requirements for applying the practice to achieve its intended purpose. A debris removal plan shall be developed prior to initiating any land clearing activities. As a minimum, the plans and specifications shall include, as applicable, the following items:

- limits of area to be cleared,
- location of areas off limits for disposal areas,
- location of trees or woody vegetation to be left undisturbed,
- for timber to be salvaged include kinds of timber, length of logs, and location of stacking,
- method of disposal for all material not salvaged,
- location of disposal areas,
- burning related activities and authorizations,
- erosion control measures.

OPERATION AND MAINTENANCE

The following actions shall be carried out to ensure that this practice functions as intended throughout its expected life. These actions include normal repetitive activities in the application and use of the practice (operation), and repair and upkeep of the practice (maintenance).

- A maintenance program shall be established to maintain vegetative cover while controlling undesired and exotic vegetation.
- Watercourses and water quality shall be protected during and after removal of trees and vegetation.
- The use of mechanical treatments, prescribed burning, pesticides and/or other chemicals shall be planned and applied in a manner that does not compromise the intended purpose.
- Select equipment sizes and capacities that will handle the clearing tasks in a timely and economically feasible manner.
- Avoid crossing with heavy equipment when wet.
- Remove excess non-vegetative debris present or as it surfaces during clearing.